(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 4 March 2004 (04.03.2004)

PCT

(10) International Publication Number WO 2004/019512 A1

(51) International Patent Classification7:

H04B 3/14

(21) International Application Number:

PCT/BE2003/000140

- (22) International Filing Date: 20 August 2003 (20.08.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 02447160.9

22 August 2002 (22.08.2002) EF

- (71) Applicant (for all designated States except US); VRIJE UNIVERSITEIT BRUSSEL [BE/BE]; Pleinlaan 2, B-1050 BRUSSELS (BE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): KULJK, Maarten [BE/BE]; Vredestraat 154, B-2600 BERCHEM -ANTWERPEN (BE).
- (74) Agents: VAN MALDEREN, Joëlle et al.; Office Van Malderen, Place Reine Fabiola 6/1, B-1083 Brussels (BE).

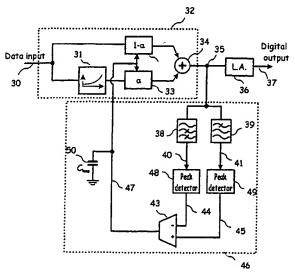
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ADAPTIVE EQUALIZER



(57) Abstract: The present invention is related to an adaptive equalizer comprising: an equalizer filter (32) for filtering a distorted signal from a communication channel, having a data input (30) for receiving said distorted signal, a feedback signal input for a feedback control signal, and which generates an output signal at an output node (35); circuitry (46) for processing said output signal and generating said feedback control signal, the circuitry comprising a first means (38) for measuring a short-term-amplitude signal of said output signal, a second means (38) for measuring a long-term-amplitude signal of said output signal, a comparator means (43) that compares said short-term-amplitude signal and said long-term-amplitude signal and that determines the evolution of said feedback control signal, arranged such that said distorted signal is compensated for its higher frequency attenuation in said communication channel.